#### Sisyrinchium sarmentosum Suskd. ex Greene

pale blue-eyed grass Iridaceae (Iris family)

Status: State Threatened, USFWS Species of Concern

**Rank:** G1G2S1S2

General Description: Sisyrinchium sarmentosum is a perennial herb up to 12 inches tall, although generally it is only 6 to 8 inches in height. The leaves are narrow and are generally, but not always, shorter than the stem. Both the stems and leaves are a pale green or blue-green in color. Each stem has 2-7 flowers on slender pedicels. The perianth is pale blue with a yellow spot in the center. The tepals are about 1/2 inch in length and pale blue in color. The anthers are yellow. A technical description needs to be consulted for positive identification.

**Identification Tips:** *Sisyrinchium sarmentosum* is the only member of the genus with pale blue tepals within its known range. The length/width ratio of the outer tepals is about 3.0 for *Sisyrinchium sarmentosum*, while for all other northwestern members of the genus it is greater than 3.0 (Henderson 1976).

**Phenology:** The flowering time of *Sisyrinchium sarmentosum* is largely dependent upon the elevation of the population. Those at lower elevations (around 2000 feet) apparently begin flowering in mid-June. Fully mature capsules, some dehiscing, are present by mid-July. At higher elevations (3000 feet) plants begin blooming in early July and are finished blooming by early August. Mature capsules are not present at these higher elevations until mid-August. The flowers of *Sisyrinchium sarmentosum* do not open up until late morning or mid-day.

Range: Narrow endemic, known only from south-central Washington (Klickitat, Skamania, and Yakima counties) and one county in Oregon (Clackamas County). Occurs within the Eastern Cascades and Western Cascades physiographic province.

**Habitat:** The species occurs in meadows and small openings from 1600 feet to 4200 feet. The meadows, which fill with snow and/or water in winter and spring, are variously dominated by grasses and sedges. Conifers such as lodgepole pine (Pinus contorta) and Engelmann spruce (Picea engelmannii), and shrubs such as hardhack (*Spiraea douglasii*), border the meadows and are occasional invaders. The sites are relatively flat,

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Known distribution of Sisyrinchium sarmentosum in Washington

• Current (1980+)

• Historic (older than 1980)

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**Habitat** (continued): often being slightly concave. Most sites are within either the Little White Salmon River or the White Salmon River drainages. The underlying bedrock is basalt from various flows.

**Ecology:** The species occurs in low to mid-elevation meadows which are seasonally quite moist. Some sites are being invaded by shrubs and conifers. Most sites are grazed by cattle. The effects of grazing are largely unknown. At least two sites have been disked and one of these is regularly mowed for hay. The effects of these practices are not known. Although another member of the genus occurs within the range of this species, no hybridization is known.

**State Status Comments:** The small range, small number of populations, and the small total number of individuals are major factors contributing to the species' status.

**Inventory Needs:** Additional inventory of potential habitats is needed. Additional potential habitat may occur on the Gifford Pinchot National Forest, the Yakima Indian Reservation, and on private lands.

Threats and Management Concerns: The most serious threat to the species is invasion of its habitat by trees and shrubs. Grazing, timber harvest, and recreational activities are also potential threats. Road maintenance and altered hydrology could impact the species at certain sites.

**Comments:** Included within *Sisyrinchium angustifolium* Mill.

#### References:

Henderson, D.M. 1976. A biosystematic study of the Pacific Northwest blue-eyed grasses (*Sisyrinchium*, Iridaceae). Brittonia 28: 149-176.

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